

Application Serial No. 10/624,340

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REMARKS

Claims 1, 5-41, 52, 55-63, and 71-78 are pending in the application.

Applicant expresses appreciation for the allowance of claims 1, 5, 8-11, 13-41, 52, 55, 57-63, and 71-78.

Claims 6-7, 12, and 56 stand rejected under 35 U.S.C. 102(e) as being anticipated by Moradi (U.S. Patent No. 6,583,441). Applicant requests reconsideration.

Claim 6 sets forth a capacitor construction that includes, among other features, an insulative nitride layer between a first electrode and a surface supporting the capacitor construction, a capacitor dielectric over the first electrode, and a second electrode over the capacitor dielectric. Page 2 of the Office Action alleges that Moradi discloses each and every limitation of claim 6. Applicant traverses.

Page 2 of the Office Action alleges that, in Moradi, nitrogen-comprising layer 24 discloses the claimed insulative nitride layer and that substrate 12 discloses the claimed surface supporting the capacitor construction. The Office Action further alleges that conductive material 20 discloses the claimed first electrode and that nitrogen-comprising layer 24 is between conductive material 20 and the surface of substrate 12. Review of the entire text of Moradi, including Figure 6 relied upon in the Office Action, does not reveal any support for the allegation that nitrogen-comprising layer 24 is between conductive material 20 and substrate 12. On the contrary, the express text of Moradi and the figures referenced therein (e.g. column 6, lines 14-38 and Fig.

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6) describe and show instead that nitrogen-comprising layer 24 is between conductive material (first electrode) 20 and second electrode 32.

Page 2 and elsewhere throughout the Office Action merely make the bare allegation that nitrogen-comprising layer 24 is between conductive material 20 and substrate 12. The Office Action does not provide any reasoning explaining how such a conclusion may be reached given the express description in Moradi of a contrary structure. Review of Moradi does not reveal any discussion of an alternative structure wherein nitrogen-comprising layer 24 is instead described as between conductive material 20 and substrate 12.

Column 3, lines 37-50 of Moradi describe first forming conductive material 20 having a roughened outer surface 22 and thereafter forming nitrogen-comprising layer 24 over roughened surface 22 of conductive material 20. No apparent support exists for the Office's implied allegation that conductive material 20 is instead formed over nitrogen-comprising layer 24. Applicant asserts that the Office's proposal to provide nitrogen-comprising layer 24 between conductive material 20 and substrate 12 may frustrate an intended purpose of Moradi.

Column 3, lines 14-46 of Moradi describe a conductively doped diffusion region 16 formed in substrate 12 and contacting conductive material 20. Diffusion region 16 defines an electrical node of a capacitor and source/drain region of a transistor. Current flow across the junction between conductive material (first electrode) 20 and diffusion region (electrical node)

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16 is required for the capacitor and transistor to function together in a DRAM cell. Applicant asserts that merely moving nitrogen-comprising layer 24 in Moradi to between conductive material 20 and substrate 12 may block the required current flow. The Office's allegations thus may render Moradi inoperable for its intended purpose.

Since the Office Action fails to establish with substantial evidence that Moradi discloses each and every limitation of claim 6, Applicant asserts that Moradi does not anticipate claim 6. Claims 7 and 12 depend from claim 6 and are not anticipated at least for such reason as well as for the additional limitations of such claims not disclosed.

Claim 56 sets forth a capacitor construction forming method that includes, among other features, forming an insulative nitride layer, forming a first electrode over the nitride layer, forming a capacitor dielectric over the first electrode, and forming a second electrode over the capacitor dielectric. As may be appreciated from the discussion above regarding the deficiencies of Moradi as applied to claim 6, Applicant asserts that Moradi fails to disclose each and every limitation of claim 56.

Applicant herein establishes adequate reasons supporting patentability of claims 6, 7, 12, and 56 and requests allowance of all pending claims in the next Office Action. The present Office Action marks the fourth time that claims 6, 7, 12, and 56 were rejected over art that failed to establish substantial evidence of anticipation or obviousness. The scope of such claims remained unchanged throughout each rejection and Applicant's

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response. It seems that the Office has expended more than ample effort in searching without success for suitable prior art to reject the pending claims. Applicant asserts that the time for finally allowing all pending claims to proceed to allowance need not be delayed any longer.

Applicant previously filed an IDS, including a three-page Form PTO-1449, on July 21, 2003. Applicant has not received an initialed copy of the Form PTO-1449 indicating consideration of the cited references. The Office's Image File Wrapper indicates that the Office received the subject IDS. Applicant requests return of the initialed form with the next Office Action. This represents the Applicant's fourth request for the Office to consider the cited art.

Respectfully submitted,

Dated: 09 April 2007 By: 
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